

given rise to pain had been situated between the cicatrix and end of the fibula. He also showed several drawings of stumps which he had dissected, where the neuromata were very large, and yet had occasioned no pain.—*Lond. & Edin. Month. Journ. of Med. Sci.*, April, 1843.

46. *The Starch Apparatus for Fractures.*—M. SEUTIN, the inventor of the starch apparatus for the treatment of fractures, has recently visited Dublin, where he has explained and demonstrated the application of his bandage. One great objection had been, that the apparatus, when once put on, remained a hard case round the limb, allowing no room for the necessary degree of tumefaction; and consequently endangering the safety of the member by inducing gangrene; and that, as the parts were hid from view, no timely warning was afforded of such accidents. As the starch bandage was used, there was much truth in this objection; as M. Sentin now uses it, the occurrence of such dangers is obviated. He first applied a calico roller, moderately firm, round the leg; no starch was put on the inside of this bandage, as it would stick in the hairs, and prove unpleasant to the skin when it hardened. After it was applied some starch was smeared along its surface; wherever pressure was wished to be avoided pledges of soft lint were put; a soft pasteboard splint, a little starched on the inside, was then placed on each side of the leg, and then one behind, the part about the heel and the hollow of the tendo Achillis being well stuffed with lint; a pasteboard splint was also then put in front. These were secured by a bandage smeared with starch, the end of the bandage being turned down and stuck in front, so as to be easily found. More starched bandage was applied, till the whole was a firm and smooth case. This should be left for twenty-four hours: when it has become quite dry, it is then slit down along the whole front of the outside, in the space between the tibia and fibula, down to the end of the foot. When the sides of this opening are held aside, the state of the limb can be examined. If it is found to press too much on any part, a little lint can be inserted, so as to raise the apparatus from the place pressed on; should it be desirable, any part of it covering a wound, &c. can be cut away, to allow the proper dressings to be applied, and the discharge to be removed.

Long bandages are preferred wherever it is requisite to establish a regular compression, and that the lifting up of the injured part cannot entail inconvenience to the patient, sharp pain, derangement in the coaptation, &c. Short bandages are reserved for contrary cases; they are disposed generally in three planes; it is between the layer in contact with the skin and the middle layer that the pasteboard splints are generally placed; short bandages are especially employed in lesions of the pelvic extremity. The length or breadth of the bandages is proportioned to the part which ought to be covered with them. Folds should be repeated as seldom as possible, and never on bony prominences or excrescences, which should be defended by layers of wadding, lint, or some other such material, besides the bandage.

It is important to leave uncovered the ends of the fingers or toes, whose variations of colour and of temperature furnish a sufficiently just measure of the analogous changes of the other parts of the limb covered by the bandage.

The compression exerted by this apparatus ought never to reach to that degree of violent constriction which practitioners, as little familiarized with M. Seutin's method as with the general principles of compression, have believed to be necessary for the resolution or prevention of inflammation. Compression, as understood by M. Seutin, ought to stop at a gentle methodical pressure, sufficient to moderate the afflux of blood, but not to stop it—a pressure which, in many circumstances, at the instant of its application, is only retentive, and which never acts on the soft parts, so as to be able to induce mortification in their tissues. The pressure should always be made to act from the extremities to the centre as evenly as possible, care being taken to avoid its immediate action on bony or tendinous prominences, excrescences, &c.

The starch apparatus dries in the course of from thirty to forty hours after its application, but its desiccation may be aided by the employment of artificial

heat if needed, which, however, is better avoided if possible. Unless the patient complain of pain, or much uneasiness in the injured limb, or the surgeon entertain fears on the state of the soft parts, it would be as well to defer the section of the bandage to the second or fourth day, when, if the apparatus fulfil the views proposed, it is made secure again with a starched bandage; if it exercise too much pressure, the edges must be separated, the interval being filled up with a little softened pasteboard; the exterior surface is then to be smeared with starch, and the apparatus surrounded by a starched handage, very little compressed. Folds and plaits that press the skin irregularly are to be removed; the pieces that exercise injurious local pressure are to be wet slightly with water; pieces of lint are to be inserted where necessary, and the whole to be surrounded by the starch bandage, care being taken to make a daily inspection to see that all is right. If the apparatus appear defective in any particular, it should be removed, having been previously wet with tepid water, and replaced by another, less objectionable.—*Dublin Journ. Med. Sci.*, Nov. 1842.

47. *Rare Cases of Strangulated Hernia.*—M. GERDY has met with two very curious cases of strangulated hernia. In the first the constriction took place in a narrow canal of seven or eight centimetres long, which existed along the course of the superior strait of the pelvis, and of the external iliac artery. The patient died after the operation. In the second, the hernia occurred on a level with the anterior superior spinous process of the ilium; it lay betwixt the external and internal oblique muscles, and was complicated by the presence of the testes, the adhesions of which to parts around, had, in fact, opposed the farther downward passage of the small intestines, which had therefore mounted above the iliac spine.—*J. & E. M. Journ. Med. Sci.*, May, 1843, from *L'Expérience*, Jan. 12, 1843.

48. *Vesico-Vaginal Fistula.*—The *Archives Générales de Médecine*, for March, contain a very lengthy but interesting communication on the treatment of vesico-vaginal fistula, with the detail of two successful cases, by M. Lallemand, of Montpellier. The first case is that of a lady, twenty-three years of age, labouring under this affliction from the use of instruments in her first labour. The fistula was situated about three and a half inches from the orifice of the urethra; its transverse diameter was about an inch and a half, the two lips being separated to the extent of half an inch, and the posterior one masked by a fold of the vesical mucous membrane an inch long, one third of an inch high, and one fourth of an inch thick. The greater part of the circumference of the vagina behind the fistula was blocked up and narrowed by semicircular, thick, and hard cicatrices, into which the first phalanx of the index finger could not be passed, whilst the index and medius fingers together could be passed into the bladder through the fistula.

The first step directed by M. Lallemand under these distressing circumstances, was the dilatation of the vagina by large bougies, and afterwards by conical gum elastic cylinders, which unfortunately proved, on the patient's return to Montpellier in two months' time, to have been misapplied, inasmuch as the fistula was much increased in size, and the vaginal contraction in the same state as previously. M. Lallemand, after having then for a few days attempted to dilate the vaginal passage, on the 22d of February, 1836, applied the actual cautery on the flap of vesical mucous membrane which blocked up the posterior lip of the fistula, so as completely to destroy it. The sloughs separated in a few days, and the anterior lip having been brought into the same state by the application of the nitrate of silver, the entire edges of the fistula being fresh and bleeding, the hooked catheter (*sonde-airigne*) was immediately applied, a task of some difficulty on account of the depth of the fistula and the impossibility of introducing the finger beyond the contraction of the vagina; the vesico-vaginal parieties consequently not being supported, were pierced by the hooks with difficulty, and it could not be ascertained whether they were at a proper distance from the posterior lip of the fistula. If they had been too near, the soft parts would have been torn; and if too far, the cervix uteri might have been